

-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

**Hanover House
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- 0064483 -Session-1986-87

-Superclass- TK

-Title- SMALL CONSTRUCTION PLANT

-DESCRIPTION-

Type and Purpose A specialist module which enables the student to repair and maintain small construction plant.

Preferred Entry Level 04415 Prime Movers
04410 Engineering Systems 1: Machines and Mechanisms
04411 Engineering Systems 2: Pneumatics and Hydraulics
04002 Fundamentals of Technology: Mechanical

Learning Outcomes The student should:

1. identify the functions and construction of small plant units;
2. dismantle, inspect for wear/damage and re-assemble units;
3. test units and carry out routine adjustments and maintenance;
4. work in a safe manner.

Content/ Context Corresponding to the Learning Outcomes:

1. identification and function of small plant units such as concrete mixers, rollers, dumpers, vibrating pokers, tampers, centrifugal and diaphragm water pumps, portable saw benches etc. Construction features and operating principles of above units.

2. dismantling and re-assembling procedures.
Methods of checking for correct operation, wear and damage.
3. starting, operating and stopping procedures.
Maintenance and adjustment requirements.
4. safety precautions when working on machinery.
Safety regulations relevant to specific machinery, eg. saw benches.

Suggested
Learning and
Teaching
Approaches

Relating to the Learning Outcomes

This module should be taught in a practical situation with students working on a suitable range of small plant.

1. should involve the recognition of items of construction plant supported by slides and diagrams and the dismantled inspection of units to determine their construction and operation.
2. should involve practical work dismantling and re-assembling units.
3. should involve adjusting working clearances and observation of the effects of such adjustments on operating performance.

Assessment
Procedures

All learning outcomes must be validly assessed.

The student must be informed of the tasks which contribute to summative assessment. Any unsatisfactory aspects of performance should, if possible, be discussed with the student as and when they arise.

Acceptable performance in the module will be satisfactory achievement of the performance criteria specified for each learning outcome.

The following abbreviations are used below:

LO Learning Outcome
IA Instrument of assessment
PC Performance criteria

LO1 IA Written/graphics exercise.

PC The student correctly:

- (a) identifies types of small plant;

- (b) identifies the function of units of plant;
- (c) identifies the main components of small plant.

LO2 IA Observation checklist.

PC The student satisfactorily:

- (a) dismantles and re-assembles units;
- (b) assesses damage and wear.
- (c) operates and tests units.

LO3 IA Observation checklist.

PC The student satisfactorily:

- (a) carries out operational adjustments;
- (b) completes routine maintenance.

LO4 IA Observation checklist (in which the following elements must be included).

PC The student consistently:

- (a) wears all necessary safety clothing and equipment;
- (b) behaves in a manner appropriate to the working environment;
- (c) uses tools and equipment safely.